

NATIONAL WEATHER SERVICE INSTRUCTION 10-1303

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Operations and Services

Surface Observing Program (Land), NDSPD 10-13

Inspection Procedure Guideline - Surface Observation Sites

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OPR: W/OS7 (T. Ross)

Certified by: W/OS7 (R. Dombrowsky)

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Gregory A. Mandt
Director, Office of Climate,
Water, and Weather Services

Date

Inspection Procedure Guideline - Surface Observation Sites

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1. General. An effective surface observing program depends on each observation site conforming to national and agency standards and guidelines. One of the most effective ways to ensure that standards and guidelines are being met is through first-hand evaluation of the observing programs at each staffed observing site. Visiting observing sites may also be used to provide initial and additional technical assistance, as time and resources permit.

1.1 Purpose. This procedure establishes standard guidelines for carrying out inspections of all surface observation programs and observation program management review by National Weather Service (NWS) field offices, NWS Regional Headquarters and NWS Headquarters (HQ).

1.2 Scope. Surface observation programs include:

- a. Staffed NWS observing offices including Weather Forecast Offices (WFO) and Data Collection Offices (DCO).
- b. NWS Contract Meteorological Offices (WSCMO).
- c. Paid, Part Time Basic Stations (A-Paid).
- d. Synoptic Paid Stations (SYN, S-Paid).
- e. Limited Aviation Weather Reporting Stations (LAWRS).
- f. Federal Aviation Administration (FAA) Flight Service Stations or Automated Flight Service Stations (FSS/AFSS).
- g. FAA Contract Weather Observing Stations (FCWOS), sometimes recognized as Contract Weather Offices (CWO) by FAA.
- h. Non-Federal Observing Stations (NF-OBS).
- i. Supplementary Aviation Weather Reporting Stations (SAWRS), subdivided into:
 - (1) SAWRS- Manual observation site
 - (2) SAWRS-II - Backup for the Automated Surface Observing System (ASOS)
 - (3) BSAWRS - Backup and augmentation for the Automated Weather Observing System (AWOS)

2. Responsibility for Inspection Program. Inspection visits of WFOs are the responsibility of the Regional Headquarters, made by regional Systems Operations Division (SOD) personnel or their delegated representative. NWS supervisory field office personnel inspect all other surface observing sites. The Meteorologist in Charge (MIC) is responsible for the visitation program, and

he/she may designate the individuals tasked to inspect observing stations within the assigned county warning and forecast area (CWA). Any individuals appointed to this task will be knowledgeable in the program being reviewed. NWS staff managing or working within the surface observing program are not required to hold an observing certificate in order to conduct station inspections.

- a. The supervisory field office data acquisition program managers (DAPM) and hydro-meteorological technicians (HMT) (or other inspectors designated by the MIC) are responsible for visits to staffed observing stations to review the observational programs and procedures, including the backup or augmentation of an automated system. They will also check to ensure that the proper site exposure is maintained, e.g., whether new construction has caused an obstruction, and note any conditions that would adversely affect the performance of the observing sensors. Electronics technicians (ET) are responsible for visits to staffed and unstaffed automated observing stations for calibration of all equipment and for ensuring continuous proper exposure of the surface observing sensors.
- b. Calibration, and the proper sensor exposure of the AWOS, is solely the responsibility of the FAA.

3. Pre-Inspection Activity and Guidelines.

3.1 Advance Notification of Inspection. The MIC at each NWS field office and/or the supervising person of all other surface observing programs (e.g., FAA tower chief, airport manager, etc.) scheduled for inspection should be notified of each planned visit as far in advance as possible. The MIC of the NWS office must also be notified of any planned visits in their CWA. Any changes in the visitation schedule should also be brought to the attention of the field station. Whenever practical, visits should be scheduled so that the MIC and/or the supervisor of the surface observing program may be contacted both before the inspector begins work at the station and again just prior to departure.

3.2 Advance Preparation for Inspection. Prior to making an inspection, the person designated as the inspector should review all pertinent information regarding the station. Such advance preparation will permit the inspector, in many cases, to concentrate efforts in the particular station's known problem areas, thereby making better use of time. Include the following advance preparation activities:

- a. Consider type of observing program to be inspected and forms and checklists required (e.g., WS Form B-32, WS Form B-33, WS Form B-1, visibility charts, etc.).
- b. Ensure all manuals and forms to be used are the correct ones and up to date.
- c. Review previous surface program inspection report.

- d. Review reports from other regional and local forecast office personnel recently visiting the station.
- e. Review station personnel roster, making note of recent personnel changes. (Note: It is desirable for the inspector to recognize the names of all the observing and supervisory personnel at the station to be visited.) Prepare a list of certified observers from the regional listing (name, certificate number, and programs certified) for each station to be visited. Review and update each list when checking the observer certificates at the station being visited.
- f. Review observing errors detected at the supervising office by use of computer-based “check surface observation” programs or quality control reports from local, regional, and/or national sources.
- g. Review appropriate station description, instrumentation, and information forms (e.g., NWS Form A-1, NWS Form A-3, r Factors, etc.).
- h. Spot check recently transmitted observations and compare them with recorded observations if applicable.
- i. Determine the lowest instrument approach minimum (visibility/ceiling) for each station to be visited as published in the “National Ocean Service (NOS) U.S. Terminal Procedures.” Compare these values to those used at the station.

4. The Observation Site Inspection. The following guidelines are intended to assist inspectors from regional SOD and supervising field offices in maximizing the effectiveness of observation site inspections.

4.1 Frequency and Duration of Inspections. Routine inspection visits for observation program review by regional SOD personnel or their assigned representative should be made to staffed NWS offices at least once every two years. Supervising field office personnel should conduct inspection visits to all staffed surface observing sites at least once each year, with the exception of SAWRS sites that require a minimum of two inspection visits per year. Additional visits may be required for sites having recent changes in equipment, programs, or personnel, or when records indicate less than a satisfactory observation program exists. Allow sufficient time to completely review the observation program. Since observational programs vary in complexity and/or content, the visitation time will normally vary from a few hours to a full day. Depending on requirements and availability, additional time may be needed for technical assistance.

4.2 Conducting the Surface Observation Program Review. WS Form B-32, Surface Observations Inspection Guide, is provided to assist the inspector in conducting a complete program review. Use of the form is mandatory. The inspector will find it helpful in that most significant aspects of the program are included in a simple checklist that may be retained for future use. It should also be used as an action item list, and if requested by the site supervisor and copying facilities are available, a copy may be left at the field station. There are seven electronic

versions of the form, one generic and six that are specific to different categories of observing programs. The generic version may be used in place of any one of the other six.

- a. Six observation program specific versions of the B-32 are available:
 - (1) Federal manual observation programs (FAA [LAWRS, AFSS, FSS], FCWOS, NWS, NWSCMO).
 - (2) A-Paid, S-Paid NWS funded manual observation programs.
 - (3) ASOS augmentation and backup (FAA [LAWRS, AFSS, FSS], FCWOS, NWS, NWSCMO, NF-OBS) observation program.
 - (4) SAWRS - non-Federal manual observation program.
 - (5) SAWRS-II - non-Federal backup to ASOS observation program.
 - (6) BSAWRS - non-Federal backup and/or augmentation of AWOS observation program.

- b. The inspection guide includes, but is not limited to, the following areas:
 - (1) Arrangement of Observing Facilities. Determine if the site for taking visual observations satisfies the requirements in NWS Instruction (NWSI) 10-1302. At airports, evaluate if the location of meteorological sensors complies with requirements established in the Federal Standard for Siting Meteorological Sensors at Airports, FCM-S4-1994, (available through regional SOD, or the Observing Systems Branch, W/OPS22, at HQ). Briefly evaluate the lighting and safety of observing facilities.
 - (2) Pressure. The pressure/altimetry program is one of the most critical elements at a surface observation site and must be thoroughly checked for equipment and observation procedure accuracy. Many programs depend on accurate pressure observations, and transmitted pressures are used by the FAA and other aviation interests for control and separation of air traffic. Pressure comparisons should be made by the inspector, comparing the traveling standard with the home station standard and back-up instruments on each visit to ensure accurate pressures. Pressure comparisons for the automated observing systems should be accomplished by electronics technicians.
 - (3) Temperature and Humidity. Proper exposure and accuracy of the temperature and humidity instrumentation (if needed) are critical in surface weather observations. Proper exposure of primary instrumentation and for adequate backup should be checked closely, in accordance with

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NWSI 10-1302 and agency specific requirements. For example, the FAA may not require some locations to provide back-up instrumentation for temperature and dewpoint. Temperature comparatives should comply with the station's appropriate observing handbook.

- (4) Precipitation. Ensure precipitation equipment (if needed) is properly exposed and adequate back-up equipment is maintained in accordance with NWSI 10-1302. Observation procedures should be checked for compliance with instructions in the station's appropriate observing handbook.
- (5) Wind. Visual checks of the wind equipment (if needed) should be made to determine if readings appear to be accurate and are properly observed. Proper annotation of recording charts (when available) should be checked. Wind sensor exposure should be checked.
- (6) Ceiling. Review exposure and operation of equipment (if needed.) Observation procedures should be monitored, and ceiling height tables should be checked for accuracy if appropriate. If recorder charts are still in use, ensure that they are properly annotated.
- (7) Other Equipment and Procedures. Inspect other equipment exposure and observing procedures as outlined in the inspection guides.
- (8) Observational Aids and Facilities. Check visibility charts for currency and proper format. Initial and date the charts if they appear to be accurate. Check the criteria for special observations for accuracy. The latest "NOS Instrument Approach Procedures" publication should be used to check the local special criteria.
- (9) Preparation of Records. Review a sample of records for completeness, neatness, and accuracy if applicable. To ensure that observations have been correctly disseminated and that errors have been corrected properly on MF1M-10 forms, review several days of transmitted reports with the corresponding days of MF1M-10 forms (exception: most NWS sites will not use forms, they will be backing up automated systems).
- (10) General. Time must be allowed to monitor the observer's routine duties for proper and efficient observation methods. At NWS and FAA offices and contract sites, the station should have a set of instructions for observing, disseminating, and quality control of observations. At NWS supervising offices, the supervision of observing programs should be reviewed with the MIC.

4.3 Critique. Upon completion of the station visitation, the inspector should verbally discuss

strengths and discrepancies of the program plus the completed WS Form B-32, Surface Observations Inspection Guide, with the station manager and the supervising observer. At the request of the supervisor, and if copying facilities are available, leave a copy of the WS Form B-32, so corrective actions may be started. A post-inspection report will be completed as listed in section 5.1.

4.4 Other Station Programs. At the discretion of the Regional Headquarters, the person performing the surface observation's inspection may review other station programs at NWS offices.

5. Post-Inspection Activities.

5.1 Station Inspection Reports. Upon completion of each station visitation, the inspector prepares a clearly written or printed narrative report. WS Form B-33, Station Inspection Report, is provided for this purpose. The report will include:

- a. Type of station inspected. Manual (FAA [LAWRS, AFSS, FSS], FCWOS, NWS, NWSCMO, SAWRS, A-PAID, S-PAID) or staffed automated (FAA [LAWRS, AFSS, FSS], FCWOS, NWS, NWSCMO, NF-OBS, BSAWRS, SAWRS-II).
- b. The station visited and the dates of the visit (contained in heading).
- c. Purpose of visit. Whether a routine, follow-up, or unannounced inspection.
- d. Date of last inspection.
- e. Station Rating. Excellent, Satisfactory, Conditionally Unsatisfactory, or Unsatisfactory.
- f. Persons contacted.
- g. Any aspects of the station's program that are unusually favorable. In this category, include such items as might be adopted at other stations.
- h. An objective appraisal of the effectiveness of the surface observing program as conducted at the station. Include a list of deficiencies and for each deficiency identify the office, regional office, or person responsible for corrective action.
- i. Specific recommendations on actions, which should be taken by the station or by the regional or appropriate national headquarters (FAA or NWS) to improve the program. These should include instructional changes, facilities improvements, personnel changes, etc.

- j. Whenever feasible, photographs of documented deficiencies, e.g., exposure of sensors, safety hazards, etc. These are especially useful for discussion purposes at the Regional Headquarters.
- k. Pressure comparison results and verification of visibility charts.
- l. A list of all observers and their certificate numbers.
- m. Any other information considered pertinent to the program.
- n. A concise, overall assessment for the station's rating.

5.2 Action Items. Note any action that should be taken to alleviate deficiencies in programs and skills and any actions contemplated in response to station requests. Establish a target date for the completion of each action and determine the responsible party. Necessary actions and expected completion dates should be outlined in the station inspection report, WS Form B-33.

5.2.1 Required of NWS Offices. All follow-up action items should be accomplished as promptly as possible. Report the office's follow up actions in a memorandum to the SOD as they are accomplished. In case the action is not completed within 30 days after the visit, the station should submit a progress report.

5.2.2 Required of Contract NWS Offices and A-Paid Observers. A copy of the B-33 should be provided to the contractor or paid observer promptly upon return to the home office. A response should be requested by a specified date to close out any action items. A follow-up visit or phone call may also be required to ensure deficiencies are corrected.

5.2.3 For Non-NWS Offices. A copy of the B-33 should be provided to the station's supervisor promptly upon return to the home office. A written response should be requested by a specified date to close out any action items. A follow-up visit may also be required to ensure deficiencies are corrected.

5.2.4 Unsatisfactory or Conditionally Unsatisfactory Rating. If a station is rated unsatisfactory or conditionally unsatisfactory, notify the appropriate regional observing program manager. If the station is an NWS contract, notify the NWS regional contracting officer's technical representative (COTR) as soon as possible. After each unsatisfactory or conditionally unsatisfactory rating, a follow-up inspection should be conducted within 30 days. The follow-up report must address all items rated as unsatisfactory during the first inspection.

- a. In the rare case that a station is again rated unsatisfactory during the follow-up inspection, contact the regional observing program manager, and if the location is a NWS contract location, notify the NWS regional COTR immediately. If after two follow-up visits, the program is still unsatisfactory, the observing program should be suspended for that location.

- b. When an unsatisfactory rating is given to an FAA station, the regional observing program manager should contact the appropriate FAA Regional Headquarters and apprise them of developments. If, after two follow-up inspection visits, the unsatisfactory condition persists for a particular FAA observing program, notify NWS Regional Headquarters and W/OS7, the NWS Regional Headquarters notifies the FAA Regional Headquarters to request that the observing program be suspended.

5.3 Disposition of WS Forms B-32 and B-33. Submit the completed WS Form B-33 to the SOD of the appropriate NWS Regional Headquarters for review and appropriate actions. Forward a copy to W/OPS22. Send the copies electronically. Provide a copy of the B-32 and B-33 to the station manager of the observing program that was inspected. Make available and distribute additional copies of the completed B-33 form to other appropriate supervising offices (see regional supplements for distribution responsibilities).

- a. Retain completed WS Forms B-32 and B-33 at the inspecting field offices for at least 2 years and the B-33 at the Regional Headquarters for at least 3 years.
- b. The latest Station Inspection Report, regardless of recency, should be retained for information and continuity until superseded.

6. Special Criteria.

6.1 Unannounced Inspections. On an occasional basis, unannounced or surprise inspections may be conducted. These unannounced inspections would be especially useful at contract weather observing locations to ensure performance is at a consistently acceptable level and to identify problem areas that may otherwise not be detected. The inspection official should have reasonable confidence of access to the station prior to the inspection visit being conducted.

- a. Unannounced inspections should be considered when a supervisory office has determined that a particular station's program has fallen well below the expected surface observing standards, and all other attempts to correct the situation have been exhausted. For example:
 - (1) A station is a candidate for an unannounced inspection after a thorough review of the surface observing program has been conducted, and it is evident that the observational program does not conform with the established standards, or it is assessed that critical equipment verifications are not maintained (e.g., pressure comparisons).
 - (2) There are persistent observing errors as detected by the quality control program at the supervisory office, or by quality control reports from regional and/or national sources, and no effort is apparent from the station to improve despite repeated warnings.

- (3) A station has a history of conditionally unsatisfactory or unsatisfactory ratings, constant follow-ups, and no improvement without constant urging.
- b. Reports from other sources recently visiting the station, or that maintain contact with the station, indicate irregularities deemed to be serious enough to compromise aviation safety. Reports of uncertified observers, sensors out of calibration, substandard sensors being used, observers sleeping during shifts, or leaving the observing facilities to perform other activities, etc., should alert the supervisory office that an unannounced inspection may be in order to determine whether the performance level of the station meets established standards.

6.2 Station Ratings. The overall rating of a surface observation station should be carefully considered.

- a. The following are guidelines for the station evaluation:
 - (1) Excellent should be considered if all answers to WS Form B-32 are "YES or Satisfactory," and in the opinion of the inspector the station exceeds expected standards.
 - (2) Satisfactory should be considered if the "NO(s) or Unsatisfactory" in WS Form B-32 can be fixed quickly, and in the opinion of the inspectors the station meets or exceeds expected standards.
 - (3) Conditionally UnSatisfactory should be considered if the program has significant number of "NO(s) or UnSatisfactory" in WS Form B-32 but not enough to warrant a rating of unsatisfactory. If the program fails to improve to satisfactory within 30 days, an Unsatisfactory rating will be given.
 - (4) Unsatisfactory should be considered if numerous "NO(s) or Unsatisfactory" in WS Form B-32 and in the opinion of the inspector, the station overall program does not meet or is below expected standards.
- b. The inspector's experience, and knowledge of the observing program, should allow them to detect the strengths and weaknesses of the station and should give the inspectors the ability to recognize aspects of the observing program that may be unusually favorable. The rating of a station should not be determined solely by the number of "YES/Satisfactory" or "NO/Unsatisfactory" answers recorded on WS Form B-32. The "grace periods" listed on the B-32 for certain elements are the time limits for correcting unacceptable conditions. The B-32 remarks section or the B-33 explaining an unsatisfactory rating will include the grace periods. This instruction is not intended to include every foreseeable situation; a station may be given a particular rating for any good reason that is well documented.

Exhibit A - NWS Form B-32 Surface Observation Inspection Guide

Surface Observation Inspection Guide
NWS Form B-32
Observing Facility: _____
Date of Visit: _____
Prepared by: _____

Ratings:

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The following Ratings may be indicated by a “+” : Excellent (remarks required), Satisfactory, Conditionally Unsatisfactory or a Yes

The following Ratings may be indicated by a “-” : UnSatisfactory Conditionally Unsatisfactory or a No. Any element receiving a “-” Rating must have an explanation for corrective action to be taken or recommended procedures to follow.

Inspection Item	Rating +	Rating -	Remarks Section
1. Arrangement of Facilities	Rating	Rating	Remarks
Location of observing site adequate for backup and augmentation of automated system? (If no, explain in remarks)			
Location of weather sensors adequate?			
Adequate safety devices (sufficient lighting, guardrails on stairs, etc.)			
2. Pressure	Rating	Rating	Remarks
Type of Pressure instrument used? (Aircraft altimeter, ASI, DASI, ASOS, AWOS, mercurial, aneroid barometer, Precision digital aneroid barometers, barograph).			
Comparisons completed in accordance with observing handbooks (No Grace Period)			

Exhibit A - NWS Form B-32 Surface Observation Inspection Guide

Exhibit A - NWS Form B-32 Surface Observation Inspection Guide

Condition of Instrument(s)			
Aircraft Altimeters (SAWRS). Calibrated within the past 24 months? (No Grace Period)			
Correct height of Instrument Posted on or near instrument.			
Comparisons Properly logged on MF1M-10 or FAA form 7230-4.			
Instruments Installed Properly (No Grace Period)			
Backup Available (7 day Grace Period)			
Use/condition of aircraft altimeters () One () Two (SAWRS) (No Grace Period)			
Aneroid instruments routinely compared () daily with each other () 3 times a week with ramp aircraft.			
Surveyed Height of pressure sensor on file with NWS?			
All comparison Corrections displayed at or near DASI/ASI? (If not, instruct office to post corrections)			
If Station has a mercury barometer, make comparison readings noting the following: temperature of instrument, barometer reading, station pressure, and altimeter value.			
Comparison satisfactory with inspecting official's traveling standard? (No Grace Period SAWRS , 7 day Grace period for backup of automated systems.)			
Pressure Reduction tables satisfactory?			
Backup Procedures for automated systems clearly understood by observers?			
Other pressure instruments operated correctly (specify in remarks).			

Exhibit A - NWS Form B-32 Surface Observation Inspection Guide

Exhibit A - NWS Form B-32 Surface Observation Inspection Guide

3. Temperature and Humidity	Rating	Rating	Remarks
Temperature and dewpoint instruments properly functioning and in good condition. (30 day Grace Period (N/A LAWRS))			
Dewpoint properly computed?			
Temperature and Dewpoint Data provided . (30 day Grace Period (N/A LAWRS))			
Weekly Hygrothermometer checks? (N/A SAWRS, staffed automated stations)			
Condition of Instrument Shelter . Adequate supplies (muslin wicks, batteries, etc)?			
Location, general condition and exposure of instruments. (Where in use)			
Temperature and dewpoint backup provided for automated systems?			
4. Precipitation	Rating	Rating	Remarks
Condition of gage (8-inch, universal, etc.).			
Condition of snowboard. (Where in use)			
Measuring stick. (Where in use)			
Exposure of precipitation measuring instruments. (Where in use)			
Correct procedures used in measuring and identifying precipitation.			

Exhibit A - NWS Form B-32 Surface Observation Inspection Guide

5. Wind	Rating	Rating	Remarks
Method for determining Direction and Speed properly. (Identify the method in remarks, e.g., wind sock, flag, Beaufort Scale , estimations, etc).			
Estimation Procedures understood by Observers.			
Gusts and Squalls Understood by Observers.			
Exposure of equipment.			
Supports for equipment.			
Speed recorded in knots and accurate to within 10 %? (30 day Grace period, if equipment is required)			
True directions recorded and accurate to within 10 degrees? (30 Day Grace period, if equipment is required)			
6. Ceiling	Rating	Rating	Remarks
LBCs, balloons, ceiling lights, clinometers in satisfactory condition? (Where in use).			
Operation of equipment understood.			
Observational procedures for backing up automated equipment followed.			
Helium available and safely stored (where balloons are in use).			

Exhibit A - NWS Form B-32 Surface Observation Inspection Guide

Exhibit A - NWS Form B-32 Surface Observation Inspection Guide

7. Other Equipment and Procedures	Rating	Rating	Remarks
Aviation Service Level responsibilities understood.			
ASOS reference guides available.			
AWOS Users guide available.			
Practice observations taken.			
ASOS OID and printer in good condition.			
AWOS OT and printer in good condition.			
Proper Log on/log off procedures followed for ASOS.			
WS form B-14 properly completed. (NWS locations only)			
Required telephone numbers available. (AOMC, supervising station, etc.)			
Location of ASOS ACU.			
Location of Sunshine switch. (NWS only)			
A-1, A-3 and A5a forms up to date for station?			
Procedures for reporting RVR satisfactory.			
Cooperator willing to make observations available to other users. (7 day Grace Period, SAWRS, NF-OBS).			
Observers familiar with visibility markers.			
All recorder charts annotated as required by Observing handbooks? (List recorder charts and equipment).			

Exhibit A - NWS Form B-32 Surface Observation Inspection Guide

8. Observational Aids and Facilities	Rating	Rating	Remarks
Visibility charts available (30 day Grace Period).			
Visibility charts accurate.			
Nighttime visibility markers indicated?			
Observers understand correct procedures for reporting and backing up prevailing visibility for ASOS.			
Table of Speci criteria available and correct Notify Region for ASOS problems.			
Cloud Atlas or cloud charts available.			
WSOH #7 current and available (NWS locations).			
WSOH #8 current and available (SAWRS).			
FAA Order 7900.5 current and available (FAA, FCWOS, NF-OBS locations).			
Other aids available (Training guides, Users Guides, station duty manuals, reference guides, etc).			
9. Preparation of Records			
30 day review of observations .			
Observation records neat and legible.			
Local quality assurance of observations.			
Corrections to observations performed as required?			
Is Tower Visibility reported correctly?			
Observations reported on time?			
AWOS/ASOS backup and augmentations Procedures followed correctly?			

Exhibit A - NWS Form B-32 Surface Observation Inspection Guide

Exhibit A - NWS Form B-32 Surface Observation Inspection Guide

How many observations taken in your presence?			
Were observations taken in your presence performed adequately? If not recommend training and Notify Regional Office.			
10. General			
Quality control of observations conducted on site.			
All observers certified and current. (No Grace Period)			
Examination of observing certificates.			
Adequate on the job training for new observers.			
Adequate arrangements for notification of observers in the event of an aircraft mishap.			
Station instructions adequate for observing, disseminating and quality control of observations.			
Training aides utilized.			
Pilot reports utilized			
Remarks encoded properly when required.			
Observers adequately proficient (No Grace Period, Immediate Decertification after consultation with Regional Office)			
Valid agreement in place and signed? (SAWRS, A-Paid, S-Paid, NF-OBS)			

Overall Rating:

Excellent: _____ Satisfactory: _____

Conditionally Unsatisfactory: _____ Unsatisfactory: _____

Additional remarks:

Exhibit B - NWS Form B-33 Surface Observation Inspection Report

WS FORM B-33 (5-87)		U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE		STATION AND TYPE
STATION INSPECTION REPORT				PREPARED BY:
<input type="checkbox"/> SURFACE		<input type="checkbox"/> UPPER AIR		<input type="checkbox"/> RADA
RATING <input type="checkbox"/> EXCELLENT <input type="checkbox"/> SATISFACTORY <input type="checkbox"/> UNSATISFACTORY		TYPE OF VISIT <input type="checkbox"/> COMPLETE INSPECTION <input type="checkbox"/> FOLLOW - UP		HOME STATION
INSTRUCTIONS - Summarize the results of the station inspection in narrative form and distribute as follows: TYPE OF STATION ORIGINAL TO : _____ ONE COPY EACH TO : _____				DATE(S) OF VISIT
NWS Other		Regional headquarters Regional Headquarters		Station Supervisory Station
				NWS Headquarters, ATTN: W/OSO141 NWS Headquarters, ATTN: W/OSO141
SUMMARY				
TOTAL CORRECTION OF MERCURY BAROMETER		BAROMETER NUMBER		TOTAL CORRECTION

Exhibit B - NWS Form B-33 Surface Observation Inspection Report